## **IN THE CLAIMS:**

Please amend claims 1, 11, 23. and 31. Please cancel claims 6, 14, and 36.

1. (currently amended)A method of automatic statistics generation and management, comprising:

receiving video input data of a sporting event;

generating in real-time semantic information and geometric information based on the video input data without input from an operator <u>utilizing software applications which</u> include rules and determine from tracking information all the statistical information that is to be recorded for a game, wherein the semantic information and the geometric information generated are textual information, and the semantic information includes event model information that describes game-rule type events that occur during a game; and

generating sporting statistics based on at least one of the semantic information and the geometric information.

- 2. (original) The method according to claim 1, further including storing the sporting statistics.
- 3. (original) The method according to claim 1, further including analyzing the sporting statistics.
- 4. (previously presented) The method according to claim 1, further including providing the video input data from at least one video camera located at the sporting event.
- 5. (original) The method according to claim 1, further including receiving a query for the sporting statistics.



Claim 6 (cancelled).

7. (original) The method according to claim 1, further including analyzing the sporting statistics to discover patterns and predict future trends.

Claim 8 (cancelled).

9. (original) The method according to claim 1, wherein the input data is from a radio frequency (RF) beacon.

Claim 10 (cancelled).

11. (currently amended) An automatic statistics generation and management system, comprising:

a head-end system to receive video input data of a sporting event and to generate in real-time semantic information and geometric information based on the video input data without input from an operator <u>utilizing software applications which</u> include rules and determine from tracking information all the statistical information that is to be recorded for a game, wherein the semantic information and the geometric information generated are textual information, and the semantic information includes event model information that describes game-rule type events that occur during a game;

a statistics generation system to generate sporting statistics[.] based on at least one of the semantic information and the geometric information received from the headend system; and

a statistics management system to store and manage the sporting statistics received from the statistics generation system.

12. (previously presented) The system according to claim 11, further including



at least one video camera, located at the sporting event, to provide the video input data to the head-end system.

13. (original) The system according to claim 11, further including a gateway connected to the statistics management system to support query applications from a user interface.

Claim 14 (cancelled).

15. (original) The system according to claim 11, wherein the statistics generation system includes:

a model manager to access the semantic information and the geometric information; and

a statistics generator to receive and process at least one of the semantic and geometric information from the model manager to generate the sporting statistics.

16. (original) The system according to claim 11, wherein the statistics management system includes:

a statistics database to store and manage the sporting statistics; and a data miner to extract and analyze the sporting statistics stored in the statistics database.

- 17. (original) The system according to claim 16, wherein the data miner analyzes the sporting statistics to discover patterns and predict future trends.
- 18. (original) The system according to claim 1/1, wherein the semantic information is an Extended Markup Language (XML) file.
  - 19. (original) The system according to claim 11, wherein the sporting statistics



are saved in a predefined Extended Markup Language (XML) schema.

Claim 20 (cancelled).

21. (original) The systèm according to claim 11, wherein the input data is from a radio frequency (RF) beacon.

Claim 22 (cancelled).

23. (currently amended) An automatic statistics generation and management system, comprising:

a head-end system including a tracking system to receive and process video input data of a sporting event to generate tracking information, and a production system to receive and process the tracking information to generate in real-time semantic information and geometric information based on the video input data without input from an operator utilizing software applications which include rules and determine from tracking information all the statistical information that is to be recorded for a game, wherein the semantic information and the geometric information generated are textual information, and the semantic information includes event model information, and the semantic information includes event model information that describes game-rule type events that occur during a game;

a statistics generation system including a model manager to receive and access the semantic information and the geometric information, and a statistics generator to receive and process at least one of the semantic information and the geometric information to generate sporting statistics; and

a statistics management system having a statistics database to store and manage the sporting statistics, and a data miner to extract and analyze the sporting

statistics stored in the statistics database.

- 24. (previously presented) The system according to claim 23, further including at least one video camera, located at the sporting event, to provide the video input data to the head-end system.
- 25. (original) The system according to claim 23, further including a gateway connected to the statistics management system to support query applications from a user interface.
- 26. (original) The system according to claim 23, wherein the data miner analyzes the sporting statistics to discover patterns and predict future trends.

Claim 27 (cancelled).

28. (original) The system according to claim 23, wherein the input data is from a radio frequency (RF) beacon.

Claim 29 (cancelled).

- 30. (original) The system according to claim 23, wherein the sporting statistics are saved in a predefined Extended Markup Language (XML) schema.
  - 31. (currently amended) A program code storage device, comprising:

machine-readable program code, stored on the program code storage medium, having instructions to

receive video input data of a sporting event,

a program code storage medium; and

generate in real-time semantic information and geometric information based on the video input data without input from an operator <u>utilizing software applications which</u> include rules and determine from tracking information all the statistical information that



is to be recorded for a game, wherein the semantic information and the geometric information generated are textual information, and the semantic information includes event model information that describes game-rule type events that occur during a game, and

generate sporting statistics based on at least one of the semantic information and the geometric information.

- 32. (original) The program code storage device according to claim 31, wherein the machine-readable program code further includes instructions to store the sporting statistics.
- 33. (original) The program code storage device according to claim 31, wherein the machine-readable program code further includes instructions to analyze the sporting statistics.
- 34. (original) The program code storage device according to claim 31, wherein the machine-readable program code further includes instructions to provide the video input data from at least one video camera located at the sporting event
- 35. (original) The program code storage device according to claim 31, wherein the machine-readable program code further includes instructions to receive a query for the sporting statistics.

Claim 36 (cancelled).

- 37. (original) The program code storage device according to claim 31, wherein the machine-readable program code further includes instructions to analyze the sporting statistics to discover patterns and predict future trends.
  - 38. (original) The program code storage device according to claim 31, wherein



the input data is from a<sub>\</sub>radio frequency (RF) beacon.